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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,319	03/10/2004	Robert Dana Lundahl	ATR-3	2102
<div>7590 01/04/2006</div> <div>Hung Chang LIN 8 Schindler Ct. Silver Spring, MD 20903</div>				
<div>EXAMINER</div> <div>GREENHUT, CHARLES N</div>				
<div>ART UNIT PAPER NUMBER</div> <div>3652</div>				
DATE MAILED: 01/04/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,319

Applicant(s)

LUNDAHL ET AL.

Examiner

Charles N. Greenhut

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

I. Claim Objections

1. Claims 1-15 are objected to because claims should be numbered with consecutive Arabic numerals. CFR § 1.75(f)
2. Claims 1-15 are objected to because claims must be the object of a sentence starting with “I (or we) claim,” “The invention claimed is” (or the equivalent). MPEP § 608.01(m)
3. Claims 3-4 are objected to because “claim1” in line 1 should read -claim 1-.

II. Claim Rejections - 35 USC § 112

The following is a quotation from the relevant paragraphs of 35 U.S.C. 112:

(2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 11, and 13-15 recite mounting the robotic manipulator in a carriage frame *after* the gripping step, which is not provided for in the specification.
2. Claim 1-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - 2.1. With respect to claim 1, it is not understood what is meant by the term “image/sensor”
 - 2.2. Claim 1 recites the term “said articulating belt” in line 10. There is insufficient antecedent basis for this term.
 - 2.3. With respect to claim 2, the term “articulating belt” as defined in the specification as “try transport technology” is not understood.

- 2.4. With respect to claim 4, the term “a correct height” in line 4 is indefinite because it is ambiguous due to subjectivity.
- 2.5. With respect to claim 6, it is not clear what the group “uniform and non-uniform and non-structured bulk” in line 2 consists of.
- 2.6. With respect to claim 6, it is not clear what is meant by the term “non-structured bulk” in line 2.
- 2.7. Claim 8 recites the term, “the image sensor” in line 2. There is insufficient antecedent basis for this term.
- 2.8. Claim 10 recites the term “said carriage” in line 6. There is insufficient antecedent basis for this term.
- 2.9. Claim 10 recites the term “said lift mechanism” in line 6. There is insufficient antecedent basis for this term..
- 2.10. With respect to claim 10, it is not clear what the step of “processing said the robotic manipulator, said lift mechanism and said image sensor” entails.
- 2.11. Claim 11 recites the term “said carriage” in line 5. There is insufficient antecedent basis for this term.
- 2.12. With respect to claim 11, the term “a correct height” in line 5 is indefinite because it is ambiguous due to subjectivity.
- 2.13. Claim 12 recites the limitation, “the articulating belt” in line 4. There is insufficient antecedent basis for this term.
- 2.14. Claim 12 recites the limitation, “the fixed takeaway conveyor” in line 4-5. There is insufficient antecedent basis for this term.

III. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim(s) 1-15 is/are rejected under 35 U.S.C. 102(b) as being anticipated by MADAY (US 5,913,655 A).

1.1. With respect to claim 1, MADAY discloses a container (Fig. 1), manipulator (40)/(42), end of arm tool (200)/(202), takeaway conveyor (12), conveying means (230)/(232), sensor (180)/(182) and computer (Fig. 9-10)/(Table Col 9-10).

1.2. With respect to claim 2, MADAY additionally discloses an articulating belt (230)/(232).

1.3. With respect to claim 4, MADAY additionally discloses a carriage (74)/(76), frame (86)/(88), and lift mechanism (152)

1.4. With respect to claim 5, MADAY additionally discloses a pallet (Fig. 1).

1.5. With respect to claim 6, MADAY additionally discloses the package is uniform (Fig. 1).

1.6. With respect to claim 7, MADAY additionally discloses a safety enclosure (90).

1.7. With respect to claim 8, MADAY additionally discloses the computer used to process an algorithm to interpret sensor data and determine the location of packages.

1.8. With respect to claim 9, MADAY additionally discloses position and path data and a variety of pre-programmed strategies.

- 1.9. With respect to claim 10, MADAY discloses holding a package in a container (18-32), gripping the package with a robotic manipulator having an end-of-arm tool (200)/(202), moving the package with a takeaway belt (12), identifying and locating with an image sensor (Table Col 9-10), and controlling with a computer (Fig. 9-10)/(Table Col 9-10).
- 1.10. With respect to claim 11, MADAY additionally discloses mounting in a carriage frame (86)/(88) and lifting the carriage (74)/(76)..
- 1.11. With respect to claim 12, MADAY additionally discloses the package pulled outward to make contact with and be carried away by the takeaway conveyor to the fixed conveyor (Figs. 1-2).
- 1.12. With respect to claim 13, MADAY additionally discloses lowering the arm until new packages are sensed (via 180).
- 1.13. With respect to claim 14, MADAY additionally discloses repeating the steps (Figs. 3-4).
- 1.14. With respect to claim 15, MADAY additionally discloses positioning a new container by an operator (Col 10. Li. 28-30).


IV. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.

Art Unit: 3652

3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CG


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